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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/974,806	10/12/2001	Shigetoshi Tomio	122.1052CIPC2	8860
21171	7590	05/18/2005	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			DINH, DUC Q	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/974,806

Applicant(s)

TOMIO ET AL.

Examiner

DUC Q DINH

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 is/are allowed.
- 6) ☒ Claim(s) 9-13 and 15-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. Claims 1-13 and 15-22 are pending. Claims 1-8 are allowed. Claims 9-13 and 15-22 are rejected.

Claim Objections

2. Claims 16-18 are objected to because of the following informalities: "said detected specific signal" should read "said detected display data" so as to make the amended limitations consistent with the amended of the independent claim 15. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 9-12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Criscimagna et al. (U. S. Patent No. 4,017,762), Criscimagna,

In reference to claim 9, Criscimagna discloses in Fig. 3 a voltage controlled sustain in a gas plasma display panel in Fig. 3 having an internal power circuit 20, 26 and 24 to produce other drive voltages different from high voltage provided by power supply 22, a voltage sensing unit 25-26 (voltage detection unit), and voltage control logic 23 for controlling the internal power

Art Unit: 2674

power supply as claimed. Criscimagna does not disclose the sensing circuit 25 and 26 for sensing the first voltage as claimed. However, Criscimagna discloses that the sensing circuit can instead sense the voltage drift of the power supply 22.

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide a detecting circuit at the power supply 22 as suggested (col. 3, lines 61-67) so that if there should be a drift in sustain voltages, the amount of drift is sensed and the voltage controlled oscillator changes the frequency of the pulse generating accordingly. (col. 3, line 68 – col. 4, line 3).

In reference to claim 22, Criscimagna discloses the voltage from circuit 25 or 26 as second high voltage as claimed.

In reference to claim 11, refer to the rejection as applied to claims 9 and 22 for the cited limitations voltage detection unit detecting a first high voltage and internal power supply. With respect to the internal power supply controlling unit storing first and second values... Criscimagna discloses means for changing the controlling voltage of the voltage of the oscillator in response to the voltage that is representative of the sustain voltage amplitude to change the frequency of the sustain voltage according to the relationship of the minimum (first value) and maximum sustain amplitude values to sustain voltage frequency in the event that the amplitude of said sustain voltage if drift (col. 4, lines 52-58).

In reference to claim 12, Kurikko discloses the states of the deflection signals HSYNC and VSYNC can be used for controlling the control unit 6 e.g. in the following way. Switching off the microcomputer 11 sets the deflection signals HSYNC and VSYNC controlled by display adapter of the computer to a zero potential (the polarities correspond to the logical state (0,0)).

Art Unit: 2674

In one embodiment of the invention the control unit 6 of the display unit, immediately or after a predetermined delay, e.g. 1 to 5 minutes, sets the display unit to an idle state in which the device is partly switched off or to a totally inoperative state... (see col. 4, lines 27-40).

5. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa (U. S. Patent No. 5,436,634) in view of Kurikko (5,786,813).

In reference to claims 19-21, Kanazawa discloses a three electrode surface discharge alternating current plasma display panel (AC PDP) in Fig.1 having first substrate 1, second substrate 2, dielectric layer 6, a phosphor 5 deposited between the walls Discharge is mainly carried out between the X-electrodes 7 and Y-electrodes 8. In addition, Kanazawa teaches a driver control signal from panel driver controller driver 30 (Fig.17) for controlling signals of the display. Kurikko discloses CPU 6 in Fig. 2 for detecting the display data input to the plasma from external source (central unit 11), and driving control signals in response to the detected display data (see Fig. 4, col. 5, lines 24-65) i.e., the control unit 6 performs display unit control procedures in accordance with such predetermined states of the deflection signals (col. 6, lines 14-17).

It would have been obvious for one of ordinary skill in the art to provide the CPU 6 of Kurikko in the device of Kanazawa for providing signals of the video interface, display data, deflection frequency, the duration or polarity of the synchronization pulses, etc., to turn on and off different circuits in the display unit of Kanazawa (col. 2, line 36-41 of Kurikko).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 13, 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kurikko (U.S. Patent No. 5,786,813).

In reference to claim 13, Kurikko discloses in Fig. 2 a circuit to control the display 10 comprising:

a CPU 6 for detecting the video signal from external source;

internal power supply circuit generating plurality of driving voltage (col. 3, lines 65-67 and col. 4, lines 1-4); and

the CPU 6 producing the power control signals (Enable, IH, IS) and stopping an operation of the power supply 5, in response to the detected display data (col. 4, lines 5-30).

In reference to claim 15, Kurikko discloses display 10 Fig. 1 having a power control circuit in Fig. 2 comprising:

Internal power supply 5 generating plurality of operating voltages (see above)

Art Unit: 2674

CPU 6 for producing power control signals, detecting display data input to the plasma from external source (central unit 11), and driving control signals in response to the display data (see Fig. 4, col. 5, lines 24-65) i.e., the control unit 6 performs display unit control procedures in accordance with such predetermined states of the deflection signals (col. 6, lines 14-17).

In reference to claims 16-17, Kurikko discloses the CPU 6 producing the power control signals (Enable, IH, IS) and stopping an operation of the power supply 5, in response to the detected display data (col. 4, lines 5-30)

In reference to claim 18, Kurikko discloses the states of the deflection signals HSYNC and VSYNC can be used for controlling the control unit 6 e.g. in the following way. Switching off the microcomputer 11 sets the deflection signals HSYNC and VSYNC controlled by display adapter of the computer to a zero potential (the polarities correspond to the logical state (0,0)). In one embodiment of the invention the control unit 6 of the display unit, immediately or after a predetermined delay, e.g. 1 to 5 minutes, sets the display unit to an idle state in which the device is partly switched off or to a totally inoperative state. The control unit 6 may maintain the display unit in the idle state (which can be rapidly restored to an operative state) for a predetermined delay period of e.g. 1 to 2 hours after the last operation and then fully switch off the display. By means of the three other polarities of the deflection signals HSYNC and VSYNC [logical states (1,0), (0,1) and (1,1)], the microcomputer 11 could command the control unit 6 to set the display unit into different states, e.g. to reduce power consumption (col. 6, lines 27-40).

Allowable Subject Matter

8. Claims 1-8 are allowed as indicated in the Previous Office Action.
9. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

10. Applicant's arguments, see the Request to withdraw Finality, filed on October 15, 2004, have been fully considered and are persuasive. Therefore, the Final Rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Criscimagnal, Kurikko and Kanazawa as elaborated in this Office Action.

Conclusion


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edouard Patrick can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2674

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUC Q DINH
Examiner
Art Unit 2674



PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER

DQD
April 22, 2005